## WHAT IS CLAIMED IS:

A method of participation information delivery in an automatic auction system, comprising the steps of:

displaying information about auction received via an on-line circuit;

selecting an auction subject specified by an operator out of displayed subjects;

creating, for said selected subject, auction ordering information including a desired price, number of purchase, and a highest possible price in competition for the desired price; and

transmitting said auction ordering information to an auctioneer terminal.

- 2. A method of participation information delivery in an automatic auction system according to claim 1, wherein for each of selected subjects, a flag specifying whether participation in the auction should be conducted after effecting a successful bid once is added to said auction ordering information and transmitted.
- A method of participation information delivery in an automatic auction system according to claim 1, wherein said number of purchase is specified by any one method selected out of constant quantity designation, quantity range designation, and remaining quantity designation.
- 4. A method of participation information delivery in an automatic auction system according to claim 1, wherein a flag specifying whether purchase should be

conducted even if the number of purchase is less than a desired amount is added.

- 5. An automatic auction method comprising the steps of:
- (a) collecting a plurality of auction ordering information pieces each including a desired price, number of purchase, and a highest possible price in competition received via on-line circuits;
  - (b)\setting an auction price;
- (c) determining whether there is an auction ordering information piece having a desired price coinciding with said set auction price;
- (d) if there is an auction ordering information piece in said step (c) and number of purchase is satisfied for the auction ordering information piece, settling the transaction(s), lowering said auction price, and then proceeding to said step (c), and

if there is an auction ordering information piece in the step (c) and number of purchase is not satisfied for the auction ordering information piece, raising said auction price, and then proceeding to step (f);

- (e) if there are no auction ordering information pieces in the step (c), lowering the price, and proceeding to said step (c) again;
- (f) determining whether the set auction price is greater than sum of said desired price and said highest possible price in competition to be added;

(g) if the condition of said step (f) is satisfied and the desired amount is satisfied, settling the transaction(s) and proceeding to said step (c),

if the condition of said step (f) is not satisfied, raising the price and proceeding to said step (f); and

- (h) conducting an auction by repeating processing of said steps (c) to (g) until subject products are exhausted or a fixed price is reached.
- 6. An automatic auction method according to claim 5, wherein said number of purchase is specified by using the constant quantity designation or the quantity range designation, and

in said step (c) an auction issue is judged to be present if the remaining quantity of the product is equal to or greater than a lower limit value in the case of the quantity range designation, and an auction issue is judged to be present if the remaining quantity of the product is equal to or greater than a desired quantity in the case of the constant quantity designation.

7. An automatic auction method according to claim 5, wherein in said step (d), the desired quantity is judged to be satisfied, if sum of:

sum total of numbers of purchase of fixed amount bidders each issuing auction ordering information with an amount condition specified by a constant quantity;

sum total of lower limit values of desired

ranges of first variable amount bidders who are bidders each issuing auction ordering information with an amount condition specified by a quantity range designation and who have nonzero lower limit values of desired ranges;

number of second variable amount bidders who are bidders each issuing auction ordering information with an amount condition specified by a quantity range designation and who have zero lower limit values of desired ranges; and

number of all amount bidders each issuing auction ordering information with an amount condition specified by all quantity is less than or equal to a current remaining quantity.

8. An automatic auction method according to claim 5, wherein said steps (d) and (g) comprise the steps of:

allocating the product of said constant quantity to the fixed amount bidders each issuing auction ordering information with an amount condition specified by a constant quantity, and allocating the product of the lower limit value of the desired range to the first variable amount bidders who are bidders each issuing auction ordering information with an amount condition specified by a quantity range designation and who have nonzero lower limit values of desired ranges; and

if the product remains, and there are somebodies among all amount bidders each issuing auction ordering information with an amount condition specified by all quantity, said first variable amount bidders, and

second variable amount bidders who are bidders each issuing auction ordering information with an amount condition specified by a quantity range designation and who have zero lower limit values of desired ranges,

allocating the product to the bidders so as not to exceed the desired quantities for said first variable amount bidders and said second variable amount bidders, and so as to allocate equal quantities to the bidders, and thereby settling the transaction.

- 9. An automatic auction method according to claim 5, wherein if a rise of the price has exceeded a predetermined fixed value in the step (g), the transaction is settled by allocating the product to bidders in competition according to a fixed procedure.
- 10. An automatic auction method according to claim 5, wherein if bidders disappear as a result of a price rise, the transaction is settled by allocating the product to bidders in competition in an immediately preceding price state according to a fixed procedure.
- 11. An automatic auction method according to claim 9, wherein said fixed procedure comprises allocating the product to fixed amount bidders each issuing auction ordering information with an amount condition specified by a constant quantity, and the first variable amount bidders who are bidders each issuing auction ordering information with an amount condition specified by a quantity range designation and who have nonzero lower limit values of desired ranges, in a descending order of

the constant quantity of fixed amount bidders and the lower limit value of the desired range of said first variable amount bidders.

- 12. An automatic auction method according to claim
  11, wherein said fixed procedure further comprises
  allocating the product in the order of registration time
  of said auction ordering information if the constant
  quantities of said fixed amount bidders and the lower
  limit values of the desired ranges of said first variable
  amount bidders are the same.
- 13. A medium for recording a program, said program creating information for participating in an electronic auction by using a computer, said program conducts processing, said processing comprising:

displaying information about auction received via an on-line circuit;

selecting an auction subject specified by an operator out of displayed subjects;

creating, for said selected subject, auction ordering information including a desired price, number of purchase, and a highest possible price in competition for the desired price; and

transmitting said auction ordering information to an auctioneer terminal via an on-line circuit.

14. An automatic auction method conducted by an auctioneer terminal connected to one or more bidder terminals via a network, said automatic auction method comprising the steps of:

- a) inputting auction ordering information containing a desired price and an auction condition from each of said bidder terminals;
- b) setting an initial value of a price from input means
- c) in response to existence of auction ordering information containing a desired price coinciding with said set price, notifying said bidder terminal of transaction settlement and terminating the processing;
- d) in response to nonexistence of auction ordering information containing a desired price coinciding with said set price, resetting said set price on the basis of said auction condition; and
- e) executing said step c) or d) on the basis of said reset price.
- 15. An automatic auction method conducted by an auctioneer terminal connected to one or more bidder terminals via a network, said automatic auction method comprising the steps of:
- a) inputting auction ordering information containing a desired price, number of purchase, and a highest possible price in competition for said desired price from each of said bidder terminals.
- b) setting an initial value of a price from input means;
- c) lowering said set price until an auction
  issue appears;
  - d) if there is at least one auction is sue and a

desired quantity which is a sum total of numbers of purchase of auction issues is not satisfied, determining whether there is an auction issue coinciding in price by comparing the price set at said step c) with sum of said desired price and said highest possible price in competition to be added; and

e) raising the price set at said step c) until said desired quantity is satisfied.

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